



Computer Programming Lab

COE 211

Fall 2022

Lab session: 4

Instructor: Christophe El-Khoury

Requirements

1. Inside the COE_211 directory you created in assignment 3, create a new directory called "StaffManagement".
2. Inside this directory, there should be 2 files:
 - a. Employee.java (40%)
 - i. A class representing the skeleton of a staff member
 - ii. Should contain the following
 1. Constructor that sets the employee's:
 - a. First Name (string)
 - b. Last Name (string)
 - c. Age (integer)
 - d. Monthly Salary (double)
 - b. EntryPoint.java (60%)
 - i. This is the main class to be executed by our code
 - ii. Should contain a public static method
 - iii. Once executed, this class will ask the user (-5%): Please input the employee's first name:
 - iv. then, this class will ask the user (-5%): Please input the employee's last name:
 - v. then, this class will ask the user (-5%): Please input the employee's age:
 - vi. then, this class will ask the user (-5%): Please input the employee's monthly salary:
 - vii. If the user finishes inputting their employee, the code will print out the following (-20%):

```
Employee information: Christophe El-Khoury, 56, 1000.0
```
 - c. Bonus point (20%): you get a bonus point if the code allows for inputting a random number of employees between 1 and 10.
 - i. When the code starts running, it will display: You have X insertions left.
 - ii. Every time the user finishes inputting an employee's data, the code will display You have X insertions left.
 - iii. After finishing execution, the code has to display all of the inputted employees

When you are done, your GitHub repository should contain 2 commits:

1. Commit for the Employee.java file
2. Commit for the EntryPoint.java file
3. Push your code.

IF NO GITHUB ACCESS:

1. ZIP both files into FirstName_LastName_T_Lab4.zip

2. Send email to christophe.elkhoury@lau.edu.lb

Solution Manual

1. Employee.java file

```
public class Employee{
    String firstName, lastName;
    int age;
    double salary;

    Employee(String first, String last, int old, double money){
        firstName = first;
        lastName = last;
        age = old;
        salary = money;
    }
}
```

2. EntryPoint.java file

```
import java.util.Scanner;
import java.util.Random;

public class EntryPoint{
    public static void main(String[] args){

        // variables

        String firstName, lastName;
        int age;
        double salary;
        Scanner scan = new Scanner(System.in);
        Random rnd = new Random();
        int insertions = rnd.nextInt(10) + 1;
        Employee[] employee = new Employee[insertions];

        // System.out moment
        System.out.println("You have " + insertions + " insertions left.");

        // for loop time

        for (int i = 0; i < insertions; i++){
```

```

// Scanner moment

System.out.println("Please input the employee's first name:");
firstName = scan.nextLine();

System.out.println("Please input the employee's last name:");
lastName = scan.nextLine();

System.out.println("Please input the employee's age:");
age = scan.nextInt();

System.out.println("Please input the employee's monthly salary:");
salary = scan.nextDouble();

scan.nextLine();

// Final answer

employee[i] = new Employee(firstName, lastName, age, salary);

System.out.println("You have " + (insertions - (i + 1)) + " insertions
left.");
}

for (int j = 0; j < insertions; j++){
    System.out.println("Employee information: " + employee[j].firstName + " " +
employee[j].lastName + ", " + employee[j].age + ", " + employee[j].salary );
}
}
}

```